



SHUTTER SCHOOL

Field Workbook

An 8-lesson photography course you carry into the field.

CAMERA **Nikon D90**

LENS **AF-S DX Nikkor 18-105mm f/3.5-5.6G ED VR**

THE 8-LESSON COURSE

01 The Machine

02 The Language of Light

03 Manual Mode

04 Nailing Focus

05 Composition & Seeing

06 Working with Light

07 Color & White Balance

08 Putting It Together

PHOTOGRAPHER

DATE STARTED

The Three Controls

CONTROL	MORE LIGHT WHEN...	LESS LIGHT WHEN...	THE “LOOK” IT CONTROLS
Aperture	f-number ↓ (f/3.5)	f-number ↑ (f/22)	Background blur (depth of field)
Shutter	slower (1/15)	faster (1/1000)	Frozen vs. blurred motion
ISO	higher (1600)	lower (100)	Clean vs. grainy noise

Reading the Light Meter

In Manual mode, adjust your three controls until the marker sits on **0** — the camera saying your photo is balanced.



Marker LEFT of 0 = too dark • RIGHT of 0 = too bright. Later, aim for -1 (moody) or +1 (bright & airy) on purpose.

Your Lens Cheat Facts (18–105mm VR)

- **Widest aperture changes with zoom:** f/3.5 at 18mm → f/5.6 at 105mm.
- **It has VR (stabilizer):** flip VR to **ON** for handheld shots — steadier, and lets you shoot a bit slower.
- **Handheld shutter:** keep it faster than 1/60s — and 1/125s+ when zoomed toward 105mm.
- **Best background blur:** zoom to 105mm, open to f/5.6, stand close, background far behind your subject.
- **Focus switch:** leave the lens's **A – M** switch on **A** (autofocus).

STARTING POINTS

Scene Recipes

Dial one of these in, half-press, then nudge settings until the meter reads 0. Trust the meter over the exact numbers.

SCENE	ZOOM	APERTURE	SHUTTER	ISO	WHY
Portrait	105mm	f/5.6	1/200	200–400	Zoom in + open up + stand close = soft background.
Sports / pet	any	f/5.6	1/1000	400–800	Fast shutter freezes the action.
Landscape	18mm	f/8–f/11	1/125	100–200	Narrow aperture keeps it sharp near-to-far.
Indoors / dim	18mm	f/3.5	1/100	800–1600	Widest opening, VR on, higher ISO to grab light.

“Which setting do I change?” — the order

1	Aperture — set the LOOK first. Blurry background? Wide (small f-number). Everything sharp? Narrow (big f-number).
2	Shutter — set it fast enough to be sharp. Handheld 1/125+. Fast action 1/500+. Stops blur from shaky hands.
3	ISO — use it to finish reaching 0. Still too dark? Raise ISO until the meter hits 0. Keep it as low as you can.

Lesson Skills

04 · Nailing Focus

- **AF-S** = still subjects (locks once). **AF-C** = moving subjects (keeps tracking).
- Move the single focus point onto the **eyes**. Half-press to focus & lock.
- Lens **A-M** switch on **A**.
- Tack-sharp = fast shutter + VR on + steady + breathe out.

05 · Composition

- **Rule of thirds** — subject off-centre, on a line or crossing.
- **Leading lines** guide the eye; **frame** with doorways/branches.
- **Fill the frame** — step closer. **Change your angle** — get low or high.
- Check the background before you shoot.

06 · Working with Light

- Direction: **front**=flat, **side**=shape & drama, **back**=glow / silhouette.
- Soft light flatters: **golden hour**, **window light**, overcast days.
- Avoid harsh midday sun on faces.
- Ask “where’s the light coming from?” then place your subject in it.

07 · Color & White Balance

- Light color runs **cool/blue** ↔ **warm/orange**.
- **Auto** WB usually works — switch when colors look off.
- **Incandescent** fixes orange indoor bulbs; **Cloudy/Shade** add warmth.
- Shoot **RAW** to fix white balance later with no quality loss.

Lesson 08 — Putting It Together: See the light → compose → set exposure in Manual → focus on the eyes → shoot, check, adjust. Then complete your capstone photo story (Final mission).

The 14 Missions

Work through them in order and check each box. Missions 1–8 take you to full Manual; 9–14 make you a real photographer.

- ☐ **01 Find every part [L1]**
Point to the lens, mode dial, shutter, both dials, and viewfinder — say what each does.

- ☐ **02 Spot the mirror blackout [L1]**
Take 5 photos; notice the flick of black each time and explain why it happens.

- ☐ **03 Background-blur test [L2]**
On A, shoot at f/8 then at your widest (f/3.5–5.6). Compare the background blur.

- ☐ **04 Freeze vs. blur [L2]**
On S, shoot someone jumping at 1/1000, then 1/30. One freezes, one smears.

- ☐ **05 Explain the triangle [L2]**
Teach a family member what aperture, shutter, and ISO each do.

- ☐ **06 Nail the meter [L3]**
In M, adjust settings until the meter reads exactly 0. Redo until well exposed.

- ☐ **07 Same photo, three ways [L3]**
At meter 0: once wide aperture, once fast shutter, once high ISO.

- ☐ **08 The 30-shot challenge [L3]**
A whole day in Manual — 30 photos, no auto. Pick your best 5 and note the settings.

- ☐ **09 Focus on the eyes [L4]**
AF-S, single point on the near eye, 5 portraits. Zoom in — razor sharp?

- ☐ **10 Track something moving [L4]**
AF-C on a moving subject; watch it keep re-focusing to stay sharp.

- ☐ **11 One subject, five ways [L5]**
Thirds, leading line, framed, filling the frame, and a low/high angle.

- ☐ **12 Hunt the good light [L6]**
Same subject in harsh noon, by a window, and at golden hour. Compare the mood.

- ☐ **13 The white balance test [L7]**
Same indoor scene in Auto, Incandescent, and Cloudy. Which whites look white?

- ☐ **★ Capstone photo story [L8]**
Pick a theme; shoot 10–15 keepers all in Manual using focus, composition, light & color. Show your best 8.

Settings Log

After a shot you like, jot down what you used. Reading your own log later is the fastest way to learn.

#	SUBJECT	f-STOP	SHUTTER	ISO	ZOOM	METER	WHAT I LIKED / NOTES

Tip: fill a whole page before you ever switch back to “auto.” Manual gets easy fast once your hands know the dials.

Settings Log (page 2)

After a shot you like, jot down what you used. Reading your own log later is the fastest way to learn.

#	SUBJECT	f-STOP	SHUTTER	ISO	ZOOM	METER	WHAT I LIKED / NOTES